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NOTES ON THE FLORA OF TEXAS WITH ADDITIONS, RANGE EXTENSIONS AND ONE CORRECTION

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ABSTRACT

The alien plants *Macfadyena unquis-cati, Ottelia alismoides, Zeuxine strateumatica, Cyrtomium falcatum, Sageretia thea, Bacopa repens* and *Pilea microphylla* are documented as escapes in Texas. New Texas collections are given for the adventives *Senecio vulgaris, Phyllanthus urinaria, Bellardia trixago* and *Kallstroemia maxima.* Information is provided to demonstrate that *Hypericum fasciculatum* does not occur in Texas.

KEY WORDS: Floristics, Texas, aliens, weeds.

Shinners (1965) chided American taxonomists for a lack of serious attention to weedy, adventive plants. He noted that studies of weedy plants have much to tell us about evolution, phytogeography and origins of cultivated plants. In this light, the present paper is devoted to a discussion of some recently discovered adventive and potentially weedy plants in Texas. Also included are Houston area records for some rare adventive plants previously recorded elsewhere in the state. Information is also given to show that *Hypericum fasciculatum* does not occur in Texas.

In addition, the authors were involved with a new revision of the Texas Agricultural Experiment Station publication: Texas Plants–A Checklist and Ecological Summary. Here we provide the data to support the inclusion of some plants listed as new to Texas in that forthcoming publication.

All collections cited in this paper are deposited in the Spring Branch Science Center Herbarium (SBSC) in Houston, Texas. Duplicates of most collections are also at SMU,TEX or TAES.

ASTERACEAE. *Senecio vulgaris* L. Harris Co.: sidewalk weed in Alabama Shopping Center on S. Shepherd Street in Houston, 25 Jun 1987, *Brown 11200.* A native of Eurasia and present in North America as a ruderal weed. Lipscomb (1978) reported it from Dallas and Wichita cos. This Harris Co. collection and

one from New Orleans, Louisiana (Gandhi & Thomas in press) are probably the most southern in the United States.

BIGNONIACEAE. *Macfadyena unquis-cati* (L.) Gentry. Fort Bend Co.: a large naturalized population in and along Hoot's Holler Nature Trail in Brazos Bend State Park, 19 Jul 1989, *Lewis s.n.* This relatively large population formed a dense mat over the ground, and some stalks were climbing nearby tree trunks. Kay Lewis and Frank Gregg of the Houston Outdoor Nature Club discovered this population during a vascular plant survey of the park. Lynn Lowrey identified the sterile collection as *Doxantha* but Gentry (1973), noting the similarities of *Doxantha* and *Macfadyena*, submerged the single species of *Doxantha* under the older name.

EUPHORBIACEAE. *Phyllanthus tenellus* Roxb. Harris Co.: frequent weedy plant in pots in Anderson Nursery at 2222 Pech Rd in Houston, 25 Jul 1989, *Brown 14001.* Johnston (1988) reported this as present in Galveston and Chambers cos. According to Webster (1970), it is native to the Mascarene Islands and was introduced into Florida about 1920. By about 1970, Webster had found no collections from either Louisiana or Texas. It was included in a 1979 thesis on the vascular flora of Rapides Parish, Louisiana (MacRoberts 1984) and Thomas (personal communication 1989) reports collections at NLU from Lafayette and Orleans parishes. This weed has apparently spread from Florida throughout the Southeast via the commercial trade in nursery stock.

Phyllanthus urinaria L. Harris Co.: common weedy plant on moist soil adjacent to building of Northwest Campus of the Houston Community College, 25 Nov 1986, *Brown 10809*; Colorado Co.: flower bed of Stuckey's restaurant ca 1 mi west of Interstate 10 bridge over the San Bernard River, 29 Oct 1983, *Brown 6820.* Correll & Johnston (1970) list it only for Jefferson Co., but it is now a somewhat frequent weed on sandy roadsides in the pineywoods and in gardens and near buildings in cities. It is present west to Houston and with a few records to the west of the city. As in *P. tenellus*, its dispersion has probably been aided by the transport of nursery stock.

HYDROCHARITACEAE. *Ottelia alismoides* (L.) Pers. Jefferson Co.: common aquatic in J.D. Murphree Wildlife Management Area in Port Acres, 9 Sep 1988, *Brown, Neville, Stutzenbaker 13142.* Correll & Johnston (1970) report this Asian aquatic from Cameron Parish, Louisiana and it is likely to appear in Texas. However, C.D. "Stutz" Stutzenbaker, wildlife biologist at this management area, has an herbarium specimen collected in 1966 at the J.D. Murphree site. Thomas (personal communication 1989) cites additional Louisiana collections from Sabine and Calcasieu parishes.

HYPERICACEAE (CLUSIACEAE). *Hypericum fasciculatum* Lam. Reports of this shrub as native in Texas are in error. Although listed for the state in Correll & Johnston (1970) and by Johnston (1988), Adams (1973) gives the range as west only to St. Tammany Parish, Louisiana and Godfrey & Wooten (1981) report it west to south Mississippi. In the spring of 1989,

the senior author had the opportunity to collect what we believe is authentic material of *H. fasciculatum* in Liberty Co., Florida. The robust size of these Florida plants is remarkable when compared to similarly identified shrubs in Texas. An examination of herbarium specimens at SMU revealed that all of the Texas sheets labeled as *H. fasciculatum* are actually *H. galioides* Lam. According to Adams (1973), *H. galioides* is present in west Louisiana and east Texas as only narrow leaved shrubs. Texas workers are identifying these narrow leaved plants as *H. fasciculatum*. Since existing keys are not adequate to distinguish narrow leaved *H. galioides* from *H. fasciculatum*, we offer the following as a possible solution:

a. all leaf margins tightly revolute, thus leaving only the midrib vein visible on the lower surface; sepals 6-8 mm long ..... *H. fasciculatum*

a′ most leaves with margins tightly revolute with only the midrib vein visible. but many others revolute only near the margins and thus with some portion of the flat lower surface visible; sepals 3-5 mm long ..... *H. galioides*

ORCHIDACEAE. *Zeuxine strateumatica* (L.) Schlechter. Montgomery Co.: in yard at 2418 Trail River Drive in Kingwood, 19 Jan 1988, *Gudrum Opperman s.n.* Steve Young, botanist at Mercer Arboretum, brought a collection of a winter flowering orchid to the Spring Branch Science Center for identification. With the aid of Luer (1972), it was identified as this introduced Asiatic species. In the United States, it appears to be common only in peninsular Florida where Wunderlin (1982) lists it on open, grassy, disturbed sites. Clewell (1985) reports it only for Franklin Co. in cooler northern Florida. The western limits were in Louisiana with specimens from Jefferson and Plaquemines parishes (Pridgeon & Urbatsch 1977). Young (personal communication) saw an increased number of plants at this Montgomery Co. site in January 1989.

POLYPODIACEAE. *Cyrtomium falcatum* (L.f.) Presl. Harris Co.: naturalized plants on bank of Langham Creek N of Clay Road in Addicks Reservoir, W of Houston, 13 Mar 1988, *Brown & Young 11999.* Thieret (1980) mapped specimens of naturalized Asian Holly Fern from eight Louisiana parishes.

RHAMNACEAE. *Sageretia thea* (Osbeck) M.C. Johnston. Brazoria Co.: highway 35, ca 4 mi S of Alvin, 25 Jun 1988, *Brown & Lowrey 12200*; Brazoria Co.: common roadside shrub along highway 1462, 2.8 mi W of intersection with highway 409 in Alvin, 19 Jul 1989, *Brown 13998.* An Asiatic shrub forming hedges between highways and adjacent fields near Alvin. Lynn Lowrey (personal communication 1989) claims that the state highway department at one time planted pauper's tea along some highways. R. Dale Thomas identified a sterile collection as a *Sageretia* and it matched herbarium material of cultivated *S. theezans* (L.) Brong. at SBSC. However, Marshall C. Johnston

(personal communication 1989) indicates *S. thea* to be the correct name for this species.

SCROPHULARIACEAE. *Bacopa repens* (Sw.) Wettst. Waller Co.: in water of rice field adjacent to highway 2855, just N of intersection with highway 90, between Katy and Brookshire, 17 Aug 1986, *Brown 10662*. This tropical American aquatic was previously known in the United States from the vicinity of Rice Experimental Station in Butte Co., California (Barrett & Strother 1978), in Georgetown Co., South Carolina, and from nine parishes in south Louisiana (Thieret 1970 and personal communication from R. Dale Thomas 1989). The Texas locality is a private commercial rice field, although not far from a rice experiment station.

Bellardia trixago (L.) All. Harris Co.: two small plants in grassy area adjacent to Interstate 10 between Houston and Katy, 22 Apr 1989, *Brown 13451*. This Old World species has been adventive in California since the turn of the century and it was found in Navarro Co., Texas in 1980 (Lipscomb & Ajilvsgi 1982).

URTICACEAE. *Pilea microphylla* (L.) Liebm. Harris Co.: lawn weed at 6218 Doliver Street in Houston, 10 Sep 1988, *W.L. McClure s.n.* Wunderlin (1982) reports artillery plant as frequent in central Florida; Clewell (1985) cites collections only from Leon and Gadsden cos. in northern Florida; and Darwin, *et al.* (1981) report it as a common ruderal on the Tulane University campus in New Orleans, Louisiana. The Harris Co. plants are probably adventive from nursery stock since artillery plant is said to be a common greenhouse weed.

ZYGOPHYLLACEAE. *Kallstroemia maxima* (L.) Hook. & Arnott. Harris Co.: weedy in parking lot of Fonde Recreation Center in downtown Houston, 10 Oct 1984, *Brown 8160*; Austin Co.: sandy bottomland of Mill Creek near highway 159, bridge west of Bellville, 27 Sep 1987, *Brown 11613*. Its United States distribution includes Florida, Georgia, South Carolina, Pennsylvania and Texas. Porter (1970) considers it native to the Caribbean area and to have arrived in the United States via ship's ballast. The above two collections appear to be the first in Texas since the 1934 Lehmann collection (at TEX,GH) from Washington Co. (Porter 1969). The senior author has noted plants at the Houston site each year since the first collection.

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